Operation Contracts

# Contract 1: createOffering

**Operation:** createOffering(type: String, location: Location, schedule:Schedule)

**Cross Reference:** Use Case: Process Offerings

**Preconditions:**

* location exists in the system
* schedule exists in the system
* There are no other offerings with the same schedule and location

**Postconditions:**

* Success Scenario:
  + An offering instance was created and added to the OfferingCatalogue.
* Failure Scenarios:

1. The given location does not exist in the system.
2. The given schedule does not exist in the system.
3. There is another offering that has the same schedule and location.

# Contract 2: selectOffering

**Operation:** selectOffering(offeringID: integer, ins: Instructor)

**Cross Reference:** Use Case: Process Offerings

**Preconditions:**

* OfferingID is a valid id
* The instructor is registered in the system

**Postconditions:**

* Success Scenario:
  + instance offering (instance with the given offeringID) was found and was associated with ins by setting offering.instructor to ins.
* Failure Scenarios:

1. No offerings were found with the given offeringID
2. The instructor is not registered in the system

# Contract 3: updateOffering

**Operation:** updateOffering(offeringID: integer, type: String)

**Cross Reference:** Use Case: Process Offerings

**Preconditions:**

* OfferingID is a valid id

**Postconditions:**

* Success Scenario:
  + instance offering (instance with the given offeringID) was found and offering.type was set to type.
* Failure Scenarios:

1. No offerings were found with the given offeringID

# Contract 4: deleteOffering

**Operation:** deleteOffering(offeringID)

**Cross Reference:** Use Case: Process Offerings

**Preconditions:**

* OfferingID is a valid id

**Postconditions:**

* Success Scenario:
  + instance offering (instance with the given offeringID) was found, deleted and removed from the OfferingCatalogue.
* Failure Scenarios:

1. No offerings were found with the given offeringID